

IN THE CLAIMS

1. (currently amended) A header assembly comprising:

an insulative housing comprising a plurality of walls defining an interior cavity, wherein said insulating housing comprises at least one alignment rib extending on an exterior surface thereof; and

a plurality of contacts within said cavity and extending through one of said walls to an exterior of said housing for surface mounting to a circuit board, each of said contacts having a rib engagement area and a board contact point for surface mounting to the circuit board, wherein ~~said contacts moved from a preloaded position to a loaded position during an assembly process of said header assembly~~, said contacts engage said alignment rib at said engagement areas such that said alignment rib is aligned with said board contact points of said contacts in the loaded position and said contacts are flexed by said alignment rib ~~in the loaded position~~ to create an internal biasing force in said contacts to ensure coplanarity of said contacts for surface mounting to the circuit board.

2. (original) A header assembly in accordance with claim 1 wherein said housing comprises longitudinal side walls and lateral side walls, said alignment rib extending parallel to one of said longitudinal and lateral side walls.

3. (original) A header assembly in accordance with claim 1 wherein said housing comprises longitudinal side walls and lateral side walls and a pair of alignment ribs, said alignment ribs extending parallel to a respective one of said longitudinal and lateral side walls.

4. (original) A header assembly in accordance with claim 1 wherein said housing comprises longitudinal side walls and lateral side walls, said alignment rib extending parallel to each of said longitudinal side walls.

5. (original) A header assembly in accordance with claim 1 wherein said housing comprises longitudinal side walls, lateral side walls, and a bottom wall, said contacts extending

through said bottom wall in a plurality of rows, said contacts in each of said plurality of rows abutting said alignment rib.

6. (previously presented) A header assembly in accordance with claim 1 wherein said contacts are oriented substantially parallel to the exterior surface of said insulative housing having said alignment rib when said contacts are in the preloaded position and said contacts are obliquely oriented with respect to the exterior surface of said insulative housing having said alignment rib when said contacts are in the loaded position.

7. (original) A header assembly in accordance with claim 1 wherein said contacts comprise a length, some of said contacts having a first length and some of said contacts having a second length, said first length greater than said second length, wherein each of said first length and said second length extends to said alignment rib.

8. (original) A header assembly in accordance with claim 1 wherein said contacts comprises staggered contacts of different lengths, each of said staggered contacts engaging said alignment rib.

9. (original) A header assembly in accordance with claim 1 further comprising a solder clip attached to one of said longitudinal and said lateral side walls, said solder clip comprising an engagement surface coplanar with said contacts when said contacts are abutted against said alignment rib.

10. (original) A header assembly in accordance with claim 1 wherein said contacts include rounded ends and said alignment rib comprises a crowned surface, said rounded ends engaging said crowned surface as said contacts are preloaded.

11. (currently amended) A header assembly comprising:

an insulative housing comprising a plurality of walls defining an interior cavity and a contact interface, and at least one alignment rib extending proximate said contact interface; and

a plurality of contacts having contact sections and solder tail sections, said contact sections located within said interior cavity, said solder tail sections extending exterior to said contact interface for surface mounting to a circuit board at board contact points of said contacts, wherein said solder tails abut said alignment rib and are flexed by said alignment rib as said contacts are installed into said housing, thereby creating an internal biasing force in said contacts to ensure coplanarity of said solder tail sections for surface mounting to the circuit board, when said contacts are installed into said housing, said solder tails are positioned between said alignment rib and the circuit board such that said alignment rib is aligned with said board contact points of said contacts.

12. (original) A header assembly in accordance with claim 11 wherein said contact sections extend substantially perpendicular to a bottom wall of said housing, and said solder tail sections extend obliquely to said bottom wall of said housing .

13. (original) A header assembly in accordance with claim 11 wherein said solder tail sections are flexed about said alignment rib.

14. (original) A header assembly in accordance with claim 11 wherein said housing comprises longitudinal side walls and lateral side walls, said alignment rib extending parallel to one of said longitudinal and lateral side walls.

15. (original) A header assembly in accordance with claim 11 wherein said alignment rib comprises a crowned surface, said solder tail sections abutting said crowned surface.

16. (currently amended) A method of assembling a surface mount header assembly, the assembly including an insulative housing including a plurality of walls defining an interior surface, an exterior surface and a plurality of contact apertures extending therebetween, the housing further including an alignment rib extending on the exterior surface, the assembly further including a plurality of electrical contacts, the method comprising:

inserting the contacts through the contact apertures;

flexing a portion of the contacts against the alignment rib as the contacts are inserted, thereby preloading the contacts against the alignment rib in a coplanar relationship with one another for surface mounting to a circuit board; and

orienting the alignment rib with a mounting surface of the circuit board such that the contacts are positioned between the alignment rib and the mounting surface and the alignment rib is aligned with board contact points of the contacts.

17. (original) A method in accordance with claim 16 further comprising

partially inserting the contacts through the housing to a first position;

bending the contacts relative to the exterior surface such that an end of each contacts is angled relative to the exterior surface, the angle of the bent contacts substantially equal among the contacts, the angled ends of the contacts separated from the alignment rib; and

further inserting the contacts through the contact apertures to a second position wherein the ends of the contacts are in an abutting relationship with the alignment rib.

18. (original) A method in accordance with claim 16 wherein said inserting the contacts comprises inserting the contacts in multiple rows such that the contacts are staggered relative to one another.

19. (previously presented) A method in accordance with claim 16 wherein the housing includes a pair of alignment ribs on opposite sides of the housing, said further inserting the contacts to a second position comprising positioning some of the contacts in abutting relationship to one of the alignment ribs and positioning other of the contacts in abutting relationship to the other alignment rib.

20. (currently amended) A header assembly comprising:

an insulative housing having a mounting face and comprising an alignment rib extending along the mounting face and having a planar alignment edge along the mounting face; and

a plurality of contacts positioned relative to said housing, such that a mounting portion of each of said contacts is positioned between the ~~mounting face~~ alignment rib and a circuit board, and such that a mounting portion of each of said contacts abuts and is flexed by said alignment edge during a loading process of said contacts to create an internal biasing force in said mounting portion thereby ensuring coplanarity of said contacts along the mounting face.

21. (original) The header assembly of claim 20 further comprising at least one solder clip attached to said housing, said at least one solder clip having a planar mounting edge parallel to said alignment edge and spaced from said alignment edge a distance generally equal to a thickness of each of said plurality of contacts.